



PART 4 LABOUR MARKET

THE SUCCESS OF AN EDUCATION system is manifested in, among other things, the success of individuals in the labour market. There is a substantial body of evidence that shows that on average those with higher levels of education are more likely to participate in the labour market, face lower risks of unemployment, have greater access to further training, and receive higher earnings.

These labour market advantages are an important outcome of education. They may even be the primary economic and social outcome, because earned income enables people to achieve higher standards of living and many of the other individual and national outcomes associated with education accrue either directly or indirectly from this.

Areas examined in this chapter are education's impact on income, income premiums through education, and unemployment.

There is a lot of good quality labour market information available. However, there is a lack of longitudinal information following the many pathways of school leavers to tertiary education, the labour market and non-labour market activities.

15. IMPACT OF EDUCATION ON INCOME

WHAT WE HAVE FOUND

The higher the level of qualification held the higher the income is expected to be.

Gender disparities in earning exist, with men generally earning more than women who hold the same qualification. These disparities in earnings are reducing over time for women with tertiary qualifications.



WHY THIS IS IMPORTANT

The success of an education system is manifested in, among other things, the success of individuals in finding sustainable employment, as well as the level of wages that employers are willing to pay for their skills and knowledge. People with higher levels of education on average are more likely to participate in the labour market, face lower risks of unemployment, have greater access to further training and receive higher earnings.

These labour market advantages are an important outcome of education. They may even be the primary economic and social outcome because earned income enables people to achieve a higher standard of living and many of the other individual and national outcomes associated with education may accrue either directly or indirectly from higher incomes.

HOW WE ARE GOING

THE IMPACT OF LEVEL OF HIGHEST QUALIFICATIONS ON INCOME

New Zealanders who attain tertiary qualifications generally earn higher incomes than those without tertiary qualifications. The data show:

- from 1997 to 2005 the real median weekly income for those with bachelors degrees or higher tertiary degrees was approximately 2.5 times higher than those with school qualifications or no formal school qualifications (see Figure 15.1)
- from 1997 to 2005 the median weekly income of holders of sub-degree level tertiary qualifications was twice that of those with school qualifications or no formal school qualifications.

New Zealanders with tertiary qualifications have higher incomes on average than those without. Gender and ethnic disparities in earnings are reducing over time for those with tertiary qualifications. The data show:

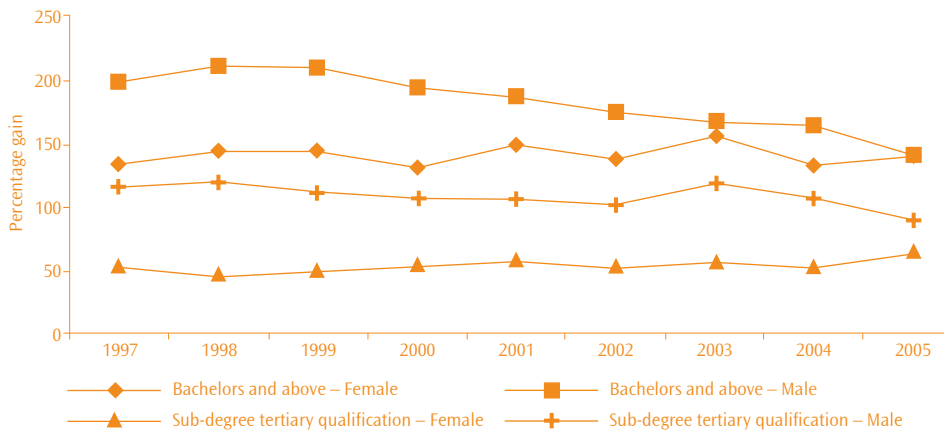
- for men the percentage gain from holding bachelors degrees or higher qualifications compared with those with no qualifications decreased from 197 percent in 1997 to 139 percent in 2005
- the percentage gain for women having bachelors degrees or higher qualifications over those with no qualifications rose from 132 percent in 1997 to 140 percent in 2005 (see Figure 15.2)
- the percentage gain for men holding sub-degree level tertiary qualifications over men with no qualifications fell from 113 percent to 87 percent. Women in that category experienced an increase in premium from 52 percent to 65 percent over the same period (see Figure 15.2)
- in 2005 the median weekly income of women with bachelors degrees or higher qualifications was 69 percent that of men. This compares with 60 percent for sub-degree qualifications, 61 percent for school qualifications, and 68 percent for no qualifications
- in 2005 Māori with bachelors degrees or higher qualifications had a median weekly income of \$902. This compares with \$802 for European/Pākehā, \$690 for Pasifika, and \$500 for the Other ethnic group who hold the same qualifications
- the median weekly income for those with sub-degree tertiary qualifications was not as widely distributed. In 2005 European/Pākehā had median weekly income of \$576, followed by Māori with \$550, Pasifika with \$510 and Others with \$440 (see Figure 15.3).

FIGURE 15.1: REAL MEDIAN WEEKLY INCOME FROM ALL SOURCES FOR THE POPULATION AGED 15 YEARS AND ABOVE BY HIGHEST QUALIFICATION (1997 to 2005)



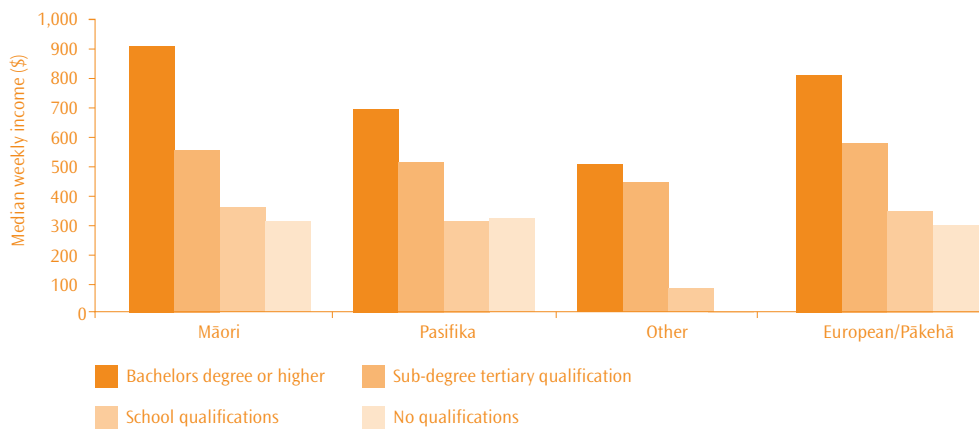
Source: Statistics New Zealand, New Zealand Income Survey (NZIS)

FIGURE 15.2: PERCENTAGE GAIN IN MEDIAN WEEKLY INCOME FOR THE POPULATION AGED 15 YEARS AND OVER, COMPARED TO THOSE WITH NO FORMAL QUALIFICATIONS BY HIGHEST QUALIFICATION AND GENDER (1997 TO 2005)



Source: Statistics New Zealand, New Zealand Income Survey (NZIS)

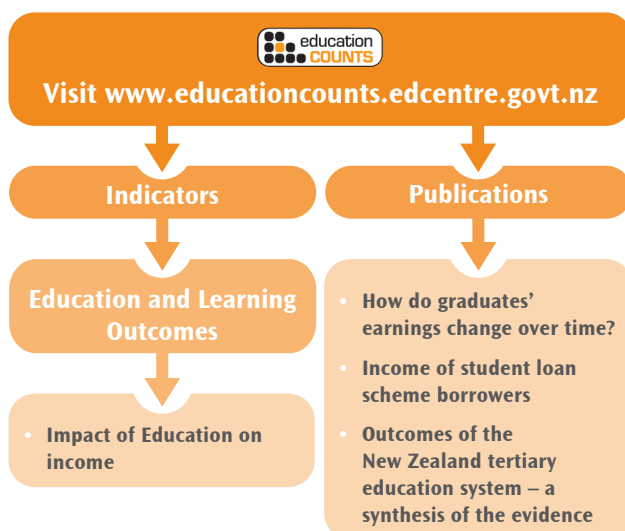
FIGURE 15.3: MEDIAN WEEKLY INCOME BY HIGHEST QUALIFICATION AND ETHNIC GROUP (2005)



Source: Statistics New Zealand, New Zealand Income Survey (NZIS)

- Owing to larger sampling errors in NZIS figures, caution needs to be exercised in interpreting the results for smaller ethnic groups (such as Māori and Pasifika) where the results are less stable than for larger groups (European/Pākehā).
- The Other ethnic group includes Asians.

WHERE TO FIND OUT MORE



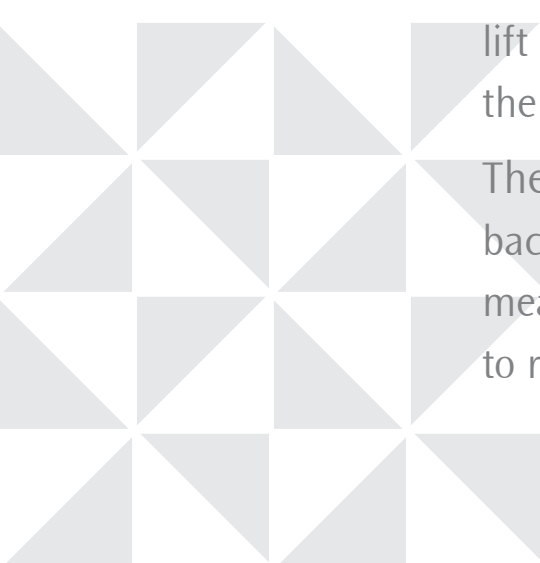
16. GRADUATE INCOME PREMIUM

WHAT WE HAVE FOUND

The differences in earnings between those who have undertaken tertiary education depend in large part on the level at which they study. But within each level of study, completion does make a difference to people's earnings. On average, people who start qualifications and complete them earn more than those who start qualifications at the same level but don't finish. In other words, the labour market pays a premium for completion of qualifications.

The highest premium is paid for completion of a bachelors degree and this premium endures over time. The premium for completion of a masters degree or a certificate qualification is less. In the case of masters degrees this reflects the fact that those who start a masters degree but don't finish will usually have completed a bachelors degree and hence will enjoy the lift in earnings that qualification brings before starting the masters degree.

The premium paid for completion of a certificate or a bachelors degree is higher among Māori and Pasifika, meaning that completion of those qualifications tends to reduce disparities between ethnic groups.



WHY THIS IS IMPORTANT

One of the marks of the success of an education system is the extent to which it helps individuals to find sustainable employment and the extent to which employers are willing to pay for their skills and knowledge. Both indicate the extent to which the education system serves the economy.

Because people with higher levels of education are more likely to participate in the labour market, they face lower risks of unemployment, have greater access to further training and receive higher earnings on average, they also benefit personally from their education.

HOW WE ARE GOING

THE PREMIUM FOR COMPLETION

The 'premium for completion' compares the mean income of students who have completed tertiary qualifications against those who started but failed to complete the same level of qualifications. This gives the 'benefit of completion' or the premium in earned income that students who complete receive.²⁹ The labour market pays the highest graduate income premium for completion of bachelors degrees compared with other qualifications. The data show:

- in 2000 those who completed bachelors degrees and left study in 1997 earned 27 percent more than those who started but left in 1997 without completing degrees (see Figure 16.1)
- the premium for this group two years later (2002) remained at 27 percent, while the premium a further two years later (2004) was 31 percent. In other words, the premium for completion of a bachelors degree is substantial and endures for at least seven years

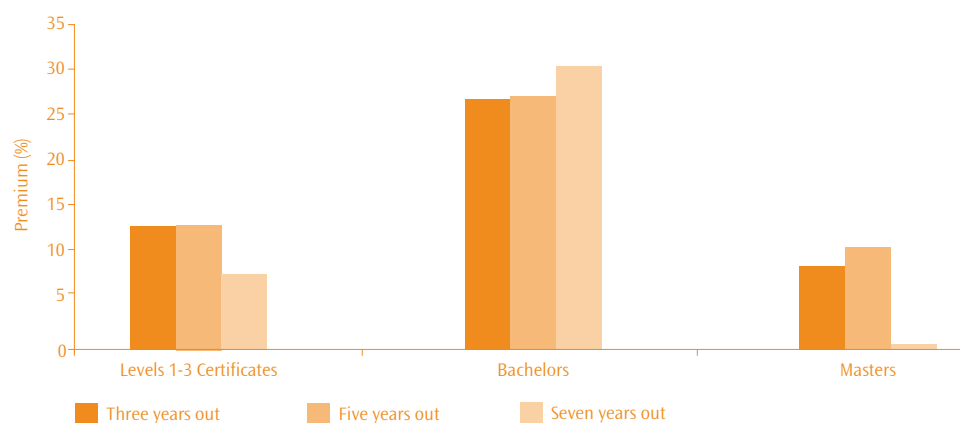
- the premium for completing Levels 1-3 certificates declined between the third year post study (13 percent) and the seventh year post study (eight percent)
- the masters premium rose between the third and fifth years post study from nine percent to 11 percent, but then fell sharply almost to zero percent in the seventh year post study.

DEMOGRAPHIC FACTORS AND THE PREMIUM FOR COMPLETION

Women generally earn less than men with equivalent qualifications and there are also disparities in earnings between different ethnic groups. This section looks at the extent to which the completion of a bachelors degree and Levels 1-3 certificates reduces these disparities. The data show:

- men who complete bachelors degrees overall enjoy higher premiums for completion of tertiary education than women. The premium for male bachelors degree graduates who left study in 1997 was 32 percent three years after leaving study, rising to 37 percent seven years after leaving study
- among women who completed bachelors degrees, the premium was 26 percent after three years and 31 percent after seven years (see Figure 16.2)
- the return to women who completed Level 1-3 certificates is slightly lower than the return to males three years post-study, 13 percent compared to 17 percent, but is the same seven years post-study (12 percent)
- Māori and Pasifika who complete bachelors degrees receive higher premiums than those of European/Pākehā ethnicity, indicating that completion at this level tends to reduce the earnings disparity between those two ethnic groups and European/Pākehā people

FIGURE 16.1: PREMIUM FOR COMPLETION OF QUALIFICATIONS THREE, FIVE AND SEVEN YEARS AFTER LEAVING STUDY BY QUALIFICATION LEVEL, FOR THOSE WHO LAST STUDIED IN 1997



Source: Ministry of Education (2006o)

²⁹ In Chapter 15 – Impact of Education on Income, comparisons of earnings were made between people with tertiary qualifications and people with no qualifications. Differences in earnings in that chapter are not directly comparable with differences concluded here.

- completion of Levels 1-3 certificates tends to reduce the disparity in incomes between European/Pākehā, and Māori and Pasifika. The premium for European/Pākehā is six percent three years post-study dropping to four percent at seven years post-study, while for Māori and Pasifika the premiums three years post-study are 31 percent and 11 percent respectively, and both have a seven year post-study premium of 16 percent.

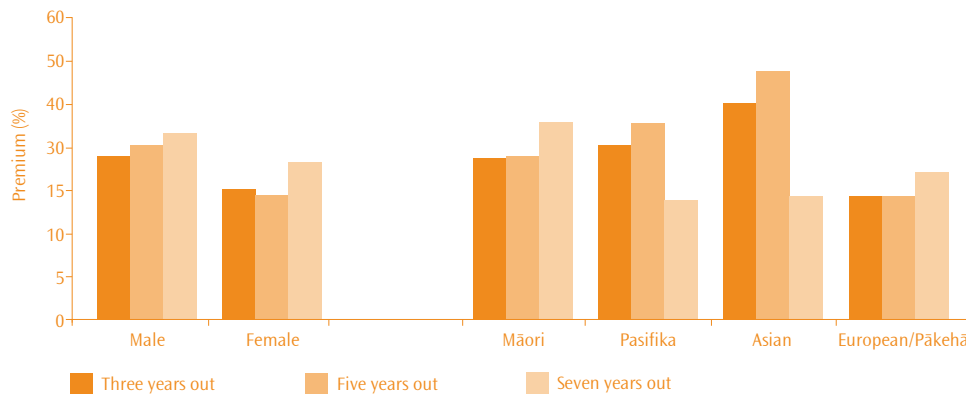
THE PREMIUM FOR COMPLETION OVER TIME

The experience three years after leaving study of those who left in 1997 can also be compared with the experience three years after leaving study of those who left in 1999 and 2001. The data show:

- the three-year post-study premium displayed in the 1997 graduates existed, and generally at the same level, for 1999 graduates and 2001 graduates (see Figure 16.3).

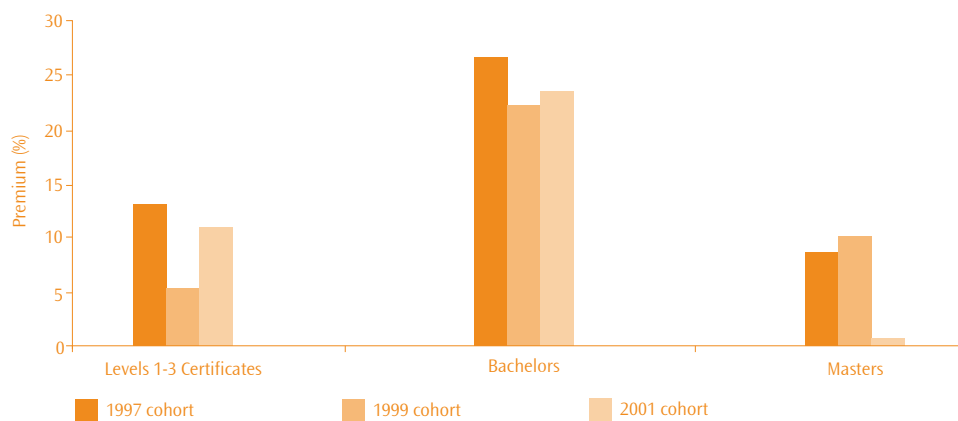
The trends observed in Figure 16.3 reflect changes that occurred in the labour market over the period covered by the analysis. The 1997 cohort were in their third year post-study in 2000, at the start of a significant upturn in the economy, while those in the 2001 cohort entered a stronger labour market and were in their third year post-study in 2004. All other things being equal, a strong labour market will tend to depress the graduate earnings premium, especially at lower qualification levels.

FIGURE 16.2: PREMIUM FOR COMPLETION OF BACHELORS DEGREES THREE, FIVE AND SEVEN YEARS AFTER LEAVING STUDY BY GENDER AND ETHNIC GROUP, FOR THOSE WHO LAST STUDIED IN 1997



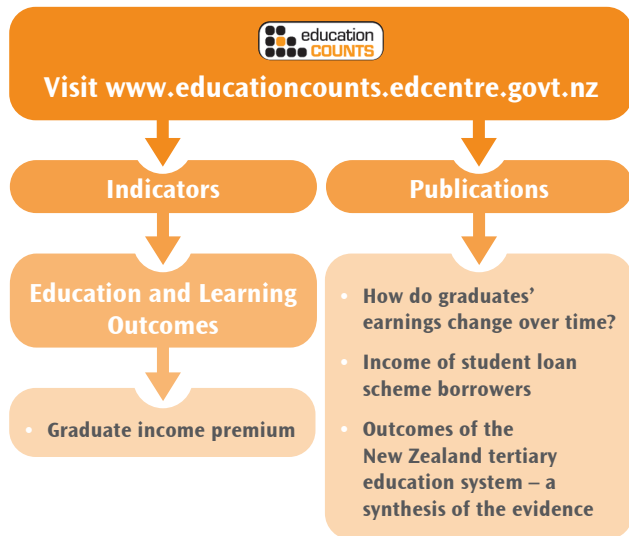
Source: Ministry of Education (2006o)

FIGURE 16.3: PREMIUM FOR COMPLETION OF QUALIFICATIONS THREE YEARS AFTER LEAVING STUDY BY QUALIFICATION LEVEL, FOR THOSE WHO LAST STUDIED IN 1997, 1999 AND 2001



Source: Ministry of Education (2006o)

WHERE TO FIND OUT MORE



17. UNEMPLOYMENT RATES

WHAT WE HAVE FOUND

The higher the level of qualification held the more likely people are to be in employment.

When there is higher unemployment the disparities in unemployment rates between qualifications is greater. During the periods of relatively higher unemployment in the 1990s people with no qualifications had an unemployment rate three to four times that of those with a bachelors degree or higher.



WHY THIS IS IMPORTANT

The success of an education system is manifested in, amongst other things, the success of individuals in finding sustainable employment. Participation in employment can lower economic dependency and deprivation and help to raise the individual's living standards. This in turn helps contribute to the growth of a healthy and wealthy society.

The employment prospects of individuals with varying levels of qualifications depend both on the requirements of labour markets and on the supply of workers with different skills. Those with low educational qualifications are at particular risk of economic isolation since they are both less likely to be labour force participants and more likely to be without jobs even if they are actively seeking them.

HOW WE ARE GOING

The unemployment rate has decreased across all qualification levels since 1998, owing to a strong New Zealand economy.³⁰ The data show:

- in the 14 years since 1991 people with tertiary qualifications have been considerably more likely than those with only school qualifications to be in employment. Unemployment rates for those with bachelors degrees or higher qualifications are very similar to those with sub-degree tertiary qualifications (see Figure 17.1).

During periods of relatively higher overall unemployment, in the early and late 1990s, the disparities in unemployment rates between those with and without tertiary qualifications were greatest. This confirms that holding a higher level qualification tends to provide greater sustainability of employment.

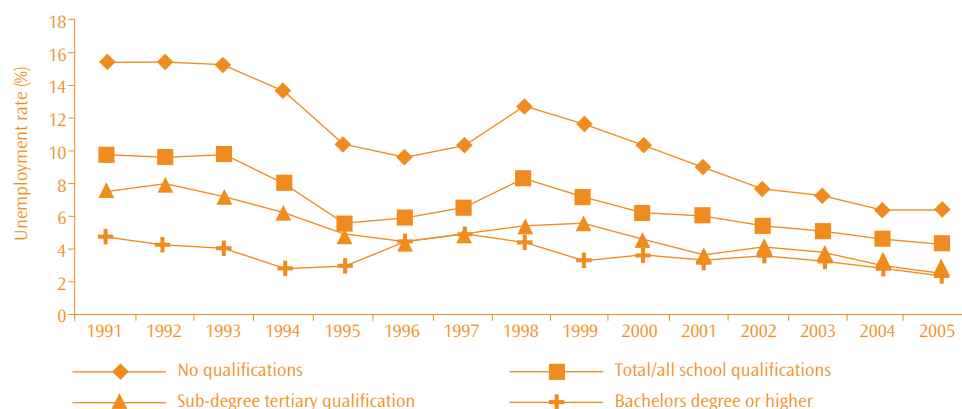
- For instance, from 1996 to 1998 while unemployment rates increased by 34 percent for those with no qualifications and 43 percent for those with school qualifications, unemployment rates remained relatively flat for those with tertiary qualifications.³¹
- The labour force participation rate has increased considerably over the last few years, resulting in a narrowing of the gap in the unemployment rate between those who are tertiary-qualified and those with no qualifications. The unemployment rate remained unchanged between 2004 and 2005 for those with no qualifications and sub-degree tertiary qualifications, whereas the rate fell by one percentage point for those with bachelors degrees or higher qualifications.

The disparities in the unemployment rates of different ethnic groups holding tertiary qualifications reduced between 1991 and 2005. The gap between ethnic groups has narrowed especially among those with bachelors degrees or higher qualifications.

The data show:

- between 1991 and 2005 the unemployment rate for European/Pākehā with bachelors degrees or higher qualifications dropped from four percent to one percent; among Māori the rate dropped from five percent to two percent; and among Pasifika the drop was more significant, from 10 percent to two percent
- the unemployment rate also narrowed gradually between ethnic populations holding sub-degree level qualifications. Between 1991 and 2005 the unemployment rate dropped for European/Pākehā with sub-degree level qualifications from five percent to two percent; among Māori the rate dropped from 19 percent to six percent; and for Pasifika the drop was from 21 percent to four percent

FIGURE 17.1: UNEMPLOYMENT RATE IN THE POPULATION AGED 15 YEARS AND OVER BY HIGHEST QUALIFICATION (1991 to 2005)



Source: Statistics New Zealand, Household Labour Force Survey

³⁰ In 2005 New Zealand had the second lowest unemployment rate among the 27 OECD nations with comparable data, just above first-placed South Korea at 3.6 percent. The rate across the whole OECD stands at 6.3 percent. The strength of labour demand seen in the Household Labour Force Survey (HLFS) and Quarterly Economic Survey (QES) are positive signs for economic growth. Furthermore, the economy's capacity to grow will have been supported by the increase in the supply of labour as reported by the Department of Labour.

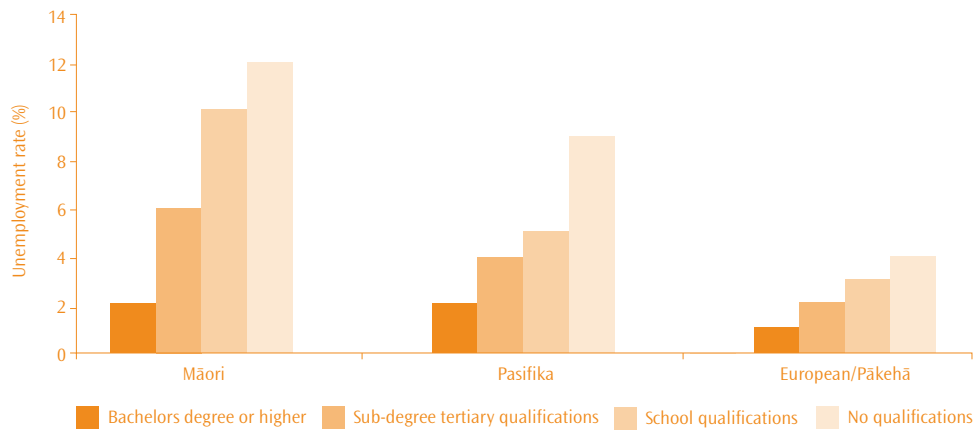
³¹ Smart, W. (2006). *Outcomes of the New Zealand tertiary education system: a synthesis of the evidence*. Wellington: Ministry of Education.

- in the June 2005 quarter, the unemployment rate among those with bachelors degrees or higher qualifications was well below the two percent mark for European/Pākehā, Māori, and Pasifika (see Figure 17.2).

The gender disparity in the unemployment rate among those with bachelors degrees or higher qualifications or school qualifications is small compared with holders of sub-degree level qualifications or no qualifications.

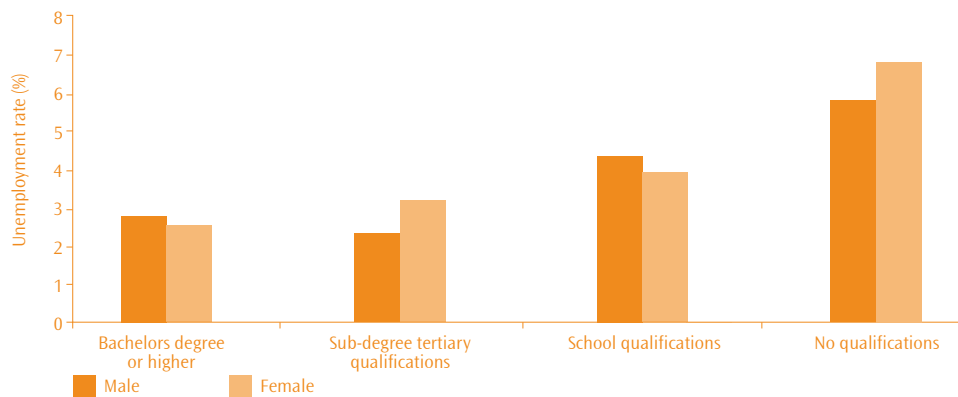
- Women with bachelors degrees or higher qualifications showed a lower unemployment rate than men, 2.5 percent and 2.8 percent respectively (see Figure 17.3).
- Men with sub-degree level qualifications had a lower unemployment rate than men with bachelors degrees or higher qualifications, 2.3 percent and 2.8 percent respectively; while the opposite is true of women.

FIGURE 17.2: UNEMPLOYMENT RATE IN THE NEW ZEALAND POPULATION AGED 15 YEARS AND OVER BY HIGHEST QUALIFICATION AND ETHNIC GROUP (2005)



Source: Statistics New Zealand, Household Labour Force Survey
 1. Owing to larger sampling errors in New Zealand Income Survey (NZIS) figures, caution needs to be exercised in interpreting the results for smaller ethnic groups (such as Māori and Pasifika) where the results are less stable than for larger groups (European/Pākehā).

FIGURE 17.3: UNEMPLOYMENT RATE IN THE NEW ZEALAND POPULATION AGED 15 YEARS AND OVER BY HIGHEST QUALIFICATION AND GENDER (2005)



Source: Statistics New Zealand, Household Labour Force Survey

WHERE TO FIND OUT MORE

